COOPER LIGHTING - SURE-LITES®

DESCRIPTION

The real workhorse in emergency lighting systems...these durable, reliable units are unparalleled in performance and provide freedom from maintenance. The HR Series units provide a low-cost, solid-state lighting system for applications in industrial, commercial or multi-housing environments. High and ultra-high capacity makes them ideal for installations where a large number of heads/exits will be remotely operated.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Electronic
- Dual Voltage Input 120/277 VAC, 60 Hz
- Line-latching
- Solid-state Voltage Limited Charger
- Solid-state Switching
- Low-Voltage Disconnect
- Brownout Circuit
- Overload/Short Circuit Protection
- Test Switch/Power Indicator Light
- Isolation Transformer

Housing Construction
- 18-Gauge Die-Formed Steel Housing
- 18-Gauge Die-Formed Steel Cover
- Knockout, Conduit or Cord Set
- Universal J-Box Mounting Pattern (High Capacity Series Only)

Housing Construction Cont.
- Keyhole Mounting Slots
- White Finish

Battery
- Sealed Lead Calcium, Recombination
- Maintenance-Free, Long-Life
- Full Recharge Time, 24 hrs. (max.)
- Polarized Battery Terminals

Code Compliance
- UL 924 Listed
- City of Chicago Approval No. 3238
- Life Safety NFPA 101
- CSA Certified (HR12117 Only)
- NEC/OSHA
- Most State and Local Codes

Warranty
- Unit: 1-year
- Battery: 5-year pro-rata

Head/Lamp Data
- Two Heads Standard
- Top Mounted
- Glare-Free Lens
- Fully Adjustable
- Remote Capability
- Metal Heads with Die Cast Metal Swivel
- Halogen Lamp Standard
- Matches Housing Finish

Mounting Requirement
- Mount only on a vertical plane (i.e. wall mount, etc.)

TOTALLY PREDICTABLE RELIABILITY.

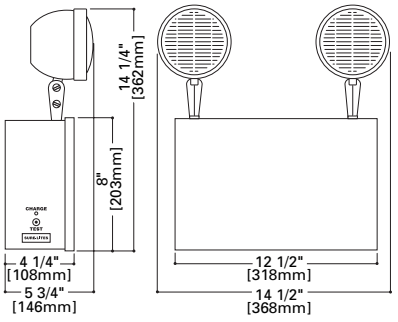

Figure 1 High Capacity

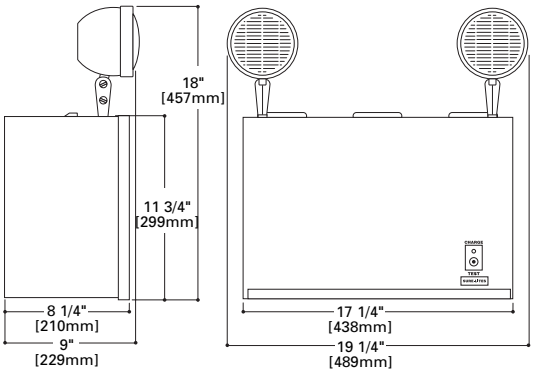

Figure 2 Ultra High Capacity

ORDERING INFORMATION

SAMPLE NUMBER: HR87CTDM

HR

Model Number
HR87C
HR117C
HR12117C
HR180C
HR12170C
HR12210C
HR12360C

Options (add as suffix)
Alternate Lamps: Consult Cooper Lighting Representative
A=Ammeter
V=Voltmeter
TDM=Time Delay Monitor
Other Options: Consult Cooper Lighting Representative

Accessories (order separately)
VK1=Voltmeter
3BRWH=Mounting Brackets (3-White Finish)
2MSWH=Mounting Shelf (High Capacity Units)
3MSWH=Mounting Shelf (Ultra-High Units)
CSK120=Cord Set (120 VAC)
CSK277=Cord Set (277 VAC)
VS2=Polycarbonate Vandal Shield
WG7=Wire Guard (High Capacity units)
WG3=Wire Guard (Ultra High Capacity units)

HR87C
HR117C
HR12117C

SEALED LEAD CALCIUM BATTERY

HR180C
HR12170C
HR12210C
HR12360C

ULTRA HIGH CAPACITY SEALED LEAD CALCIUM BATTERY

Chicago Code Emergency Lighting

ENERGY DATA

HR87C
Input Current (Max.):
120V= .50A
277V= .21A
HR117C
Input Current (Max.):
120V= .53A
277V= .22A
HR12117C
Input Current (Max.):
120V= .26A
277V= .13A
HR180C
Input Current (Max.):
120V= .98A
277V= .43A
HR12170C
Input Current (Max.):
120V= 1.08A
277V= .45A
HR12210C
Input Current (Max.):
120V= 1.02A
277V= .47A
HR12360C
Input Current (Max.):
120V= 1.17A
277V= .54A

Specifications and Dimensions subject to change without notice.
Consult your representative for additional options and finishes.

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Rated Wattage to 87 1/2% of Rated D.C. Voltage

Model	Type	DC Voltage	1 1/2 Hours	Lamp Watts	Remote Watts
HR87C	**SLC**	**6**	**87**	**24**	**63**
HR117C	**SLC**	**6**	**117**	**24**	**93**
HR12117C	**SLC**	**12**	**117**	**24**	**93**
HR180C	**SLC**	**6**	**180**	**24**	**156**
HR12170C	**SLC**	**12**	**170**	**24**	**146**
HR12210C	**SLC**	**12**	**210**	**24**	**186**
HR12360C	**SLC**	**12**	**360**	**24**	**336**

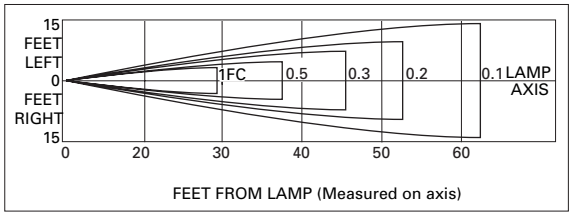
Lamp Information

Type	Wattage	Number	Figure
Halogen	**12**	**29-66**	**1**
Halogen	**12**	**29-66**	**1**
Halogen	**12**	**29-45**	**1**
Halogen	**12**	**29-66**	**2**
Halogen	**12**	**29-45**	**2**
Halogen	**12**	**29-45**	**2**
Halogen	**12**	**29-45**	**2**

*Batteries may be shipped separately. SLC=Sealed Lead Calcium

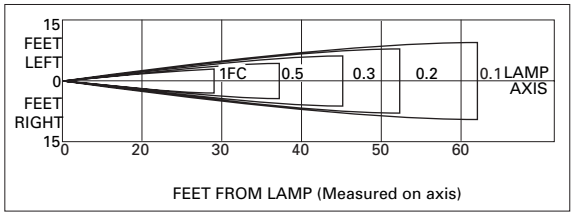
PHOTOMETRICS

Horizontal Distribution



Lamp No. 29-45 and 29-66
Initial Lumens – 302

Vertical Distribution



Lamp No. 29-45 and 29-66

TECHNICAL DATA

Heads

All metal formed aluminum lampheads. The die cast metal three dimensional swivel assembly permits approximate aiming adjustment from 80° vertical and 358° rotation. The placement is secured with a lockable pivot mounted on a rotating base ring.

Lamps

Designed specifically for emergency lighting applications, the PAR 36 sealed beam type design insures optimum glare-free light distribution along with horizontal and vertical adjustment by rotating the lens within the housing. Tungsten halogen lamps maximize light output with lower wattage.

Housing

The rugged 18-gauge die-formed steel housing is finished with an attractive white corrosion-resistant polyester powder coat paint. Cabinet has keyhole mounting slots, universal mounting pattern, and knockouts in rear and side for AC/DC wiring connections and accessory cord set. Up to three lighting heads can be mounted on the cabinet.

Line-Latched

Sure-Lites' line-latched electronic circuitry makes installation easy and economical. A labor efficient AC-activated load switch prevents the lamps from turning on during installation to a non-energized AC circuit. Line-latching eliminates the need for a contractor's return to a job site to connect the batteries when the building's main power is permanently turned on.

Solid-State Charger

Supplied with a 120/277 VAC, voltage regulated solid-state charger. Immediately upon restoration of AC current after a power failure, the charger provides a high charge rate. The charge circuit reacts to the condition of the battery and alters the rate of charge in order to maintain peak battery capacity and maximize battery life. Solid-state construction recharges the battery following a power failure in accordance with UL 924.

Overload and Short Circuit Protection

The solid-state overload monitoring device in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short circuit is removed. This overload current protective feature eliminates the need for fuses or circuit breakers for the DC load.

Brownout Circuit

The brownout circuit in Sure-Lites' units monitors the flow of AC current to the unit and activates the emergency lighting system when a predetermined reduction of AC power occurs. This dip in voltage will cause most ballasted fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Solid-State Transfer

The unit incorporates a solid-state switching transistor which eliminates corroded and pitted contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC voltage and automatically energizes the lamps. Upon restoration of the AC power, the emergency lamps will switch off and the charger will automatically recharge the battery.

Low-Voltage Disconnect

When the battery's terminal voltage falls below 80% of the rated voltage, the low-voltage circuitry disconnects the lighting load. The disconnect remains in effect until normal utility power is restored, preventing deep battery discharge.

Test Switch/Power Indicator Light

Conveniently located Test Switch allows for manual verification of proper operation of the transfer circuit and emergency lamps. The Power Indicator Light provides visual assurance that the AC power is on.

Sealed Lead Calcium Battery

The fully sealed, long-life, maintenance-free lead calcium battery is ideal for emergency lighting applications. These recombinant cycle batteries typically provide eight to ten years of life and may be operated in any position.

Warranty

All Sure-Lites' units are backed by a firm one-year warranty against defect in material and workmanship (excluding lamps). Maintenance free, long-life, sealed lead calcium batteries carry a five-year pro-rata warranty.